

REMARKS/ARGUMENTS

It is asserted that these amendments do not add new matter and are supported by the specification and claims as originally filed. Entry of these claims is respectfully requested.

REMARKS

Claims 29-48, and 52-53 are pending in the application.

Claims 29-48 and 50-53 have been rejected.

Claim 29 has been amended.

Claims 30-48 and 52-53 are kept unchanged.

Claims 49-51 and 54 have been canceled.

Claims 29-54 have been rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) at the time the application was filed, had possession of the claimed invention.

Claim 29 has been amended to delete the limitation of a polydispersity index of "2.0" and replace it with the limitation of "1.5" claimed in former claim 51, now canceled.

All the other remaining claims being dependent upon amended claim 29, the rejection has been also addressed for those claims.

For the reasons discussed above, Applicant respectfully requests that the Examiner now reconsider and withdraw the rejection of claims 29-54, under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in such a way as

to reasonably convey to one skilled in the relevant art that the inventor(s) at the time the application was filed, had possession of the claimed invention.

The rejection of claim 50 under 35 U.S.C. § 112, second paragraph, is now moot because claim 50 has been canceled.

The rejection of claims 29-50, 52 and 53 under 35 U.S.C. § 102 (b) as being anticipated by Himori et al. (EP 296850), is respectfully traversed and is addressed in light of the comments below.

Claim 29 has been amended to delete the limitation of a polydispersity index of "2.0" and replace it with the limitation of "1.5" claimed in former claim 51, now canceled.

All the other remaining claims being dependent upon amended claim 29, the rejection has been also addressed for those claims.

For the reasons discussed above, Applicant respectfully requests that the Examiner now reconsider and withdraw the rejection of claims 29-50, 52 and 53 under 102(b) as being anticipated by Himori et al. (EP 296850).

Claims 29-54 have been rejected under 35 U.S.C. 102(b) as being anticipated by, or, in the alternative, under 35 U.S.C. § 103 (a) as being unpatentable over Tatsuya et al. (JP 04198303).

Applicant maintains his arguments set forth in his previous amendment.

The reference describes many polymerization initiators and groups comprised therein. Applicant submits that the only relevant groups are dithiocarbamate groups of formula (10), noticed by the Examiner in the Office Action. Compounds described in Preparative Examples 1-24 are simple polymerization initiators.

Tatsuya et al, teach in example 30 of their patent the preparation of a block copolymer from a polypropyleneglycol precursor and a dithiocarbamate compound.

Polypropylene glycol is a polymer having units of formula $-\text{CH}_2(\text{CH}_3)-\text{CH}_2-\text{O}-$.

Precursors of formula (IIA) and (IIB), according to the instant claims do not read on those propylene glycol units. Therefore, the invention is not anticipated by the reference.

Practical Example 30 describes the preparation of a A-B-A block copolymer wherein block A is a polystyrene block and block B is a poly(propylene glycol) block (see on page 28, paragraph before table 3), by polymerizing styrene monomers in the presence of a macromolecular initiator comprising dithiocarbamate groups at both chain ends.

According to that example 30, 800ml/mn of HBr are added. Thus $500 \times 60 = 30,000$ cc of HBr. One mole of gaz equals $22.4 \text{ l} = 22,400 \text{ cc}$, in normal conditions of temperature and pression, which comes to: $30,000 / 22,400 = 1.33$ mole of HBr.

10 parts of PPG poly(propylene glycol) (MW = 1,000) represents $10 / 1,000 = 0.01$ mole of PPG with two OH functions per molecule of PPG and the number of moles of $\text{HH} = 2 \times 0.01 = 0.02$ mole of OH.

Therefore, there is a great excess of HBr per OH, which is corroborated by the fact that HBr was removed under reduced pressure. Thus, as indicated in the previous amendment, the product obtained in example 30 can only be derived from a PPG with a carbamate function at each end of the PPG chain, and, for that reason, must be a di-functional compound. Therefore, Examiner's assertion that a mono-functional PPG

may be obtained, cannot occur and it is impossible to obtain a diblock, but only a triblock.

In a nutshell, according to Tatsuya's process:

- 1- a PPG poly(propylene glycol) is first prepared, then
- 2- a dithiocarbamate is chemically drafted on each OH located at both extremities of the PPG chain, and, then,
- 3- the second block(s) is (are) added.

That process is utterly different from the instant claimed process involving a mono-functional dithiocarbamate precursor of formulae IIA or IIB, having only one dithiocarbamate function at only one chain extremity.

For the reasons discussed above, Applicant respectfully requests that the Examiner now reconsider and withdraw the rejection of claims 29-54 under 35 U.S.C. 102(b) as being anticipated by, or, in the alternative, under 35 U.S.C. § 103 (a) as being unpatentable over Tatsuya et al. (JP 04198303).

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AMENDMENT AFTER FINAL AND NOTICE OF APPEAL

In view of the preceding remarks, it is asserted that the patent application is in condition for allowance. Should the Examiner have any question concerning these remarks that would further advance prosecution of the claims to allowance, the Examiner is cordially invited to telephone the undersigned attorney at (609) 860-4180.

A notice of allowance is respectfully solicited.

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Respectfully submitted,

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Limited Recognition under 37 CFR § 10.9(b)

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